reimbursement purposes to the minimum coordination distance equations.[86] Under this approach, reimbursement would be required for all facilities within the calculated coordination zone from the PCS base station, rather than basing the requirement on the more complex and variable computations of potential interference. We tentatively conclude that use of these minimum coordination distance equations would simplify administration of the test for determining whether a cost-sharing obligation exists, and would reduce the number of disputes that may otherwise arise over whether interference would have occurred if the link were still operational. We request comment on whether any of the other standard equations of TIA Bulletin 10-F may be applied more easily for purposes of cost-sharing. We also seek comment on whether there is a more appropriate industry-accepted standard for determining interference.

53. As an additional matter, we note that incumbent microwave licensees generally employ receivers with "receiving bandwidths" that significantly exceed the authorized bandwidth of the associated transmitter. Accordingly, microwave receivers generally require protection over a frequency range twice as large as the transmission bandwidth (*i.e.*, a microwave station with a 5 MHz transmit bandwidth would require protection within a 10 MHz band to protect its corresponding receive station).[87] For purposes of determining a reimbursement obligation, however, we propose to consider only interference that occurs co-channel to the transmit and receive bandwidth of the incumbent microwave licensee. Thus, for reimbursement and cost-sharing purposes only, we propose that a 5 MHz bandwidth transmit microwave station would receive only 5 MHz protection for its receive stations (rather than the 10 MHz adjacent channel protection it would typically require to protect its receive station). Excluding adjacent channel interference for purposes of cost-sharing will serve to simplify administration of the cost-sharing plan by providing more certainty in determining when a reimbursement obligation exists. Also, it would reduce the number of receive stations that would be calculated to receive interference, thereby limiting the number of situations under which reimbursement is required. We seek comment on this proposal and any alternatives. Specifically, we request comment on whether adjacent channel interference (*i.e.*, 5 MHz transmit and 10 MHz receive protection) should be included for purposes of determining a reimbursement obligation.

54. Co-Channel Interference vs. Adjacent Channel Interference. PCIA's consensus proposal advocates that reimbursement be required only for co-channel microwave links having endpoints within a PCS licensee's authorized operating territory.[88] Co-channel links

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[86] TIA Bulletin 10-F, Equations F-3-1 through F-3-5.

[87] That is, protection would be required within the 5 MHz transmit bandwidth plus an additional 2.5 MHz on either side of the transmit bandwidth for a total of 10 MHz reception sensitivity.

[88] PCIA Comments at 10.

are defined as those with an overlap of licensed occupied bandwidth.[89] PCIA argues that inclusion of other types of interference -- such as adjacent channel interference or co-channel interference to out-of-region links -- would vastly increase the complexity of the cost-sharing process. Although PacBell's original proposal imposed a cost-sharing obligation on those licensees that cause both adjacent channel and co-channel interference, PacBell now agrees with PCIA's modification to its plan.[90]

55. We tentatively concur with PCIA's proposal that a two-part test should be adopted for determining whether reimbursement is required. Thus, a subsequent licensee would be required to reimburse the PCS relocator only if:

(1) the subsequent PCS licensee's system would have caused co-channel interference to the link that was relocated; and

(2) at least one endpoint of the former link was located within the subsequent PCS licensee's authorized market area (*e.g.*, MTA, BTA).

For example, assume a PCS licensee won the B Block license for MTA X. This PCS licensee relocates a 10 MHz microwave link operating in the B Block. The link has one endpoint in MTA X and one endpoint in neighboring MTA Y. Under our proposal, the B Block licensee in MTA Y would be required to reimburse the B Block licensee in MTA X according to the cost-sharing formula, if the PCS system in MTA Y would have caused co-channel interference to the relocated link. Whether or not interference would have occurred will be determined on the basis of the criteria set forth above.

56. We agree with PCIA that the administrative costs and burdens associated with including other types of interference outweigh any additional benefits that would be achieved. We seek comment on the types of interference that should trigger a cost-sharing obligation. Specifically, we request comment on (1) whether reimbursement should also be required if the link that is relocated would have caused adjacent-channel interference to the subsequent licensee, and (2) whether it would be difficult to determine if adjacent-channel interference would have occurred. What are the advantages and disadvantages of only requiring cost-sharing for co-channel interference?

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[89] *Id.*

[90] PacBell Reply at 1.

4. Payment Issues

a. Timing

57. Background. PacBell proposes that a PCS licensee entering a previously-cleared band would be responsible for payment under the cost-sharing proposal at the time the PCS licensee initiates service on the link that has been relocated.[91] PCIA supports this approach, contending that cost-sharing obligations should not attach until the licensee's operations actually "interfere" with the relocated link, *i.e.*, until the point when interference would have occurred if the original microwave system were still in place.[92] Alternatively, BellSouth suggests that subsequent PCS licensees be required to submit their cost-sharing payments in full *prior* to commencing operations.[93] BellSouth argues that fulfillment of the cost-sharing obligation should be treated as part of the frequency coordination process, and that licensees should not be permitted to initiate service until their payments are made in full.[94]

58. Discussion. We tentatively agree with PCIA's consensus proposal. Thus, a PCS licensee should be required to pay under the cost-sharing formula at the time that its operations would have caused interference with the relocated link. We also partially agree with BellSouth, that a PCS licensee's reimbursement obligation should be determined at the time frequency coordination is required, as discussed in more detail in Section III(A)(3), *supra*. Thus, we propose that PCS licensees contact the clearinghouse to determine reimbursement obligations prior to initiating service, although payment would not be due in full until the date that the PCS licensee commences commercial operations. We seek comment on these proposals. Should payment be due at the time the PCS licensee begins testing its system?

b. Eligibility for Installment Payments

59. Background. Under PacBell's proposal, PCS designated entities that are entitled to make auction payments in installments under our auction rules would also be allowed to pay their share of relocation costs in installments.[95] PCIA agrees with this proposal, and additionally proposes to allow UTAM to utilize installment payments, because UTAM will be

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[91] PacBell Petition at 8.

[92] PCIA Comments at 10.

[93] BellSouth Reply at 8.

[94] *Id.*

[95] PacBell Petition at 10; *see also* BellSouth Reply at 8, n. 19.

funding relocation costs with fees that will be collected over time.[96] UTAM states that a deferred payment option is necessary because of the nature of UTAM's funding mechanism.[97]

60. Under our auction rules, three different installment payment plans are currently available to C Block licensees. The first installment payment plan is available to applicants with gross revenues in excess of $75 million but less than $125 million.[98] This plan provides for the payment of interest based on the ten-year U.S. Treasury rate, plus 3.5 percent with payment of principal and interest amortized over the term of the license. The second installment plan is available to those applicants with gross revenues between $40 and $75 million.[99] This plan provides for the payment of interest equal to the ten-year Treasury rate plus 2.5 percent. The applicants eligible for this plan may pay interest only for one year with the principal and interest amortized over the remaining nine years of the license term. The third installment plan is available to small businesses with gross revenues under $40 million.[100] Under the third plan, small businesses are permitted to pay for their licenses in installments at the rate for ten-year U.S. Treasury obligations applicable on the date the license is granted. Small businesses may make interest-only payments for the fist six years, with payments of principal and interest amortized over the remaining four years of the license term.

61. Discussion. We tentatively conclude that PCS licensees that are allowed to pay for their licenses in installments under our designated entity rules should have the same option available to them with respect to payments under the cost-sharing formula. We also tentatively conclude that the installment payment option should be extended to UTAM, as proposed by PCIA. Allowing cost-sharing payments to be made in installments will significantly ease the burden of cost-sharing for these entities. We further propose that the specific terms of the installment payment mechanism, including the treatment of principal and interest, would be the same as those applicable to the licensee's auction payments described above. Thus, if a licensee is entitled to pay its winning bid in quarterly installments over ten years, with interest-only payments for the first year, it would pay relocation costs under the same formula. Because UTAM receives its funding in small increments over an extended period of time, we tentatively conclude that UTAM should qualify for the most favorable installment payment plan available to small businesses with gross revenues of $40 million or less. UTAM would therefore be permitted to make its payments on the same terms as the C Block small businesses (*i.e.*, using installments, at a rate equal to ten-year U.S. Treasury

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[96] PCIA Comments at 5.

[97] UTAM Reply at 3.

[98] 47 C.F.R. § 24.711(b)(1).

[99] 47 C.F.R. § 24.711(b)(2).

[100] 47 C.F.R. § 24.711(b)(3).

obligations applicable on the date the license is granted, and requiring that payments include interest only for the first six years with payments of principal and interest amortized over the remaining four years of the license term). We seek comment on this proposal. Specifically, we seek comment on whether the repayment schedules and interest rates that we adopted for repaying auction bids are appropriate for cost-sharing purposes.

5. Role of Clearinghouse

62. Background. PacBell recommends that a neutral clearinghouse be utilized to administer the cost-sharing proposal. PacBell suggests that the clearinghouse maintain all the cost and payment records related to the relocation of each link.[101] The clearinghouse would later determine each PCS licensee's cost-sharing obligation.[102] The majority of commenters support the establishment of a non-profit clearinghouse to collect relevant data and administer the cost-sharing system.[103] PCIA believes that the clearinghouse should be a non-profit industry organization funded by the PCS industry.[104] PCIA further suggests that the functions of the clearinghouse would include the collection of necessary information regarding when and where microwave facilities have been relocated, actual relocation costs incurred by PCS licensees, administration of the payment system, and participation in the resolution of disputes, such as existence of interference between PCS systems, adequacy of relocation documentation, and compliance with cost-sharing obligations under the proposal.[105] In its reply comments, PacBell agrees with this summary of the clearinghouse's functions.[106] BellSouth's proposal for the role of the clearinghouse is substantially similar.[107] However, UTC opposes the concept of a clearinghouse due to concerns about confidentiality.[108] UTC argues that the terms and conditions of negotiated relocations may involve strategic business information that the parties desire to keep confidential.[109]

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[101] PacBell Petition at 8-10.

[102] *Id.* at 10.

[103] *See, e.g.*, BellSouth Comments at 5; Sprint Comments at 6; UTAM Reply at 5.

[104] PCIA Comments at 5.

[105] *Id.* at 17-18.

[106] PacBell Reply at 6.

[107] BellSouth Reply at 6-8.

[108] UTC Comments at 9.

[109] *Id.*

63. Discussion. We tentatively conclude that if the proposed cost-sharing plan is adopted, it should be administered by an industry-supported clearinghouse. PCS licensees that seek reimbursement under the formula would be required to submit all applicable data, including contracts, to the clearinghouse, which would open a file for each relocation. The clearinghouse would then determine the amount of reimbursable costs to be paid by subsequent licensees pursuant to the terms of the cost-sharing plan. All Prior Coordination Notices would also be filed with the clearinghouse. The clearinghouse would then determine whether operation by the new PCS licensee would have caused interference to a relocated microwave facility, based on TIA Bulletin 10-F. If interference would have occurred, the clearinghouse would notify the new licensee of its reimbursement share under the formula.

64. We believe an industry clearinghouse is preferable to having the cost-sharing plan administered by the Commission. First, administration of the plan by the Commission would be a significant drain on our administrative resources. Second, we believe that the PCS industry has the capability and the incentive to support an industry clearinghouse. We do not propose at this time to designate any particular organization as the clearinghouse, but seek comment on the criteria we should use for designating a clearinghouse, and on whether it should be an existing organization or a new entity created for this purpose. We also seek comment on how the clearinghouse would be funded. One possibility would be for PCS licensees who seek reimbursement under the cost-sharing plan to pay an administrative fee to the clearinghouse for each relocated link that is potentially compensable under the plan. We believe that any fees assessed should be tied to the actual administrative costs of operating the clearinghouse. We seek comment on the appropriate fee level, as well as on any possible alternative approaches to funding the clearinghouse.

65. We also seek comment regarding potential confidentiality issues with respect to information submitted to the clearinghouse. While we understand UTC's concerns regarding confidentiality, we believe that specific information regarding relocation costs will need to be available through the clearinghouse in order for parties to verify the accuracy of the clearinghouse's reimbursement calculations. We also believe an open flow of information is important to the smooth administration of the cost-sharing plan, which in turn is likely to facilitate productive negotiations between PCS licensees and microwave incumbents. Finally, we believe that confidentiality issues should be resolved by the PCS and microwave industries rather than by the Commission. We therefore seek comment on the extent to which our cost-sharing proposal can accommodate the confidentiality concerns of the parties.

6. Dispute Resolution Under the Cost-Sharing Plan

66. Background. To the extent that disputes arise over eligibility for microwave relocation cost reimbursement, specific costs to be reimbursed, and whether or not interference would have occurred between the relocated microwave link and a PCS system, PacBell proposes that PCS licensees be encouraged to use alternative dispute resolution

pursuant to Section 1.18 of the Commission's rules.[110] PCIA states that the clearinghouse should preside over disputes involving licensees' cost-sharing obligations.[111] PCIA also suggests that parties be required to obtain independent appraisals of valuations in the context of disputes between PCS licensees and microwave incumbents.[112] Commission oversight would be confined to considering complaints concerning alleged failure to comply with cost-sharing obligations as part of the PCS license renewal process.[113] However, BellSouth and Southwestern Bell believe the Commission should establish specific rules for the resolution of disputes under the cost-sharing plan, including the mandatory use of alternative dispute resolution.[114]

67. Discussion. We tentatively conclude that disputes arising out of the cost-sharing plan (*i.e.*, disputes over the amount of reimbursement required, etc.) should be brought, in the first instance, to the clearinghouse for resolution.[115] To the extent that disputes cannot be resolved by the clearinghouse, we encourage parties to use expedited alternative dispute resolution procedures ("ADR"), such as binding arbitration, mediation, or other ADR techniques. We seek comment on this proposal and on any other mechanisms that would expedite resolution of these disputes, should they arise. We also seek comment on whether parties should be required to submit independent appraisals of valuations to the clearinghouse at the time such disputes are brought to the clearinghouse for resolution.[116] In addition, as PCIA suggests, we seek comment on whether failure to comply with cost-sharing obligations should be taken into consideration by the Commission when deciding on renewal and/or transfer of control or assignment applications.

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[110] PacBell Petition at 11.

[111] PCIA Comments at 17-18.

[112] *Id.* at 19-20.

[113] *Id.*

[114] BellSouth Reply at 5; Southwestern Bell Reply, Exhibit 1 at 5.

[115] Resolution of disputes between microwave incumbents and PCS licensees over relocation negotiations is discussed in Section III(B)(4), *infra.*

[116] *See* related discussion, in Section III(B)(2) *infra*, on requiring independent cost estimates if disputes arise between microwave incumbents and PCS licensees.

B. Relocation Guidelines

1. Good Faith Requirement During Mandatory Negotiations

68. Background. The Commission has not established any parameters for negotiations that occur during the voluntary period, and thus PCS licensees are free to offer the microwave incumbents a variety of incentives to expedite relocation. If a relocation agreement is not reached during this period, the PCS licensee may initiate a mandatory negotiation period, during which the parties are required to negotiate in good faith.[117]

69. Discussion. We believe that additional clarification of the term "good faith" will facilitate negotiations and help reduce the number of disputes that may arise over varying interpretations of what constitutes good faith. We tentatively conclude that, for purposes of the mandatory period, an offer by a PCS licensee to replace a microwave incumbent's system with comparable facilities (defined in further detail in Section III(B)(2), *infra*) constitutes a "good faith" offer. Likewise, an incumbent that accepts such an offer presumably would be acting in good faith; whereas, failure to accept an offer of comparable facilities would create a rebuttable presumption that the incumbent is not acting in good faith. Comparable facilities, as explained below, would be limited to the actual costs associated with providing a replacement system, and would exclude any expenses (*e.g.*, consultant fees) incurred by the incumbent without securing the approval in advance from the PCS relocator. We believe that the time for expansive negotiation is during the voluntary period and that, by the time the parties have reached the mandatory negotiation period, only the bare essentials should be required. We seek comment on our proposal. We also seek comment on the appropriate penalty to impose on a licensee that does not act in good faith.

2. Comparable Facilities

70. Background. Our rules require PCS licensees to provide microwave incumbents with "comparable facilities" as a condition for involuntary relocation.[118] In ET Docket No. 92-9, we declined to adopt a definition of comparable facilities, because we wanted to provide the parties with flexibility to negotiate mutually agreeable terms for determining comparability.[119] We determined, however, that in any case brought to the Commission for resolution, we would require that comparable facilities be equal to or superior to existing facilities.[120] To determine comparability, we said that we would consider, *inter alia*, system

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[117] 47 C.F.R. § 94.59(b); *see also ET Third Report and Order*, 8 FCC Rcd 6589 at ¶ 15.

[118] *See* 47 C.F.R. § 94.59(c)(3); *see also ET Third Report and Order*, 8 FCC Rcd 6589 at ¶ 5.

[119] *ET Third Report and Order*, 8 FCC Rcd 6589 at ¶¶ 35-36.

[120] *Id.*

reliability, capability, speed, bandwidth, throughput, overall efficiency, bands authorized for such services, and interference protection.[121] When deciding such disputes, we also stated that we would consider independent estimates by third parties not associated or otherwise affiliated with either the incumbent licensee or the new service provider.[122] Independent estimates must include a specification for the comparable facility and a statement of the costs associated with providing that facility to the incumbent licensee.[123]

71. In order to remove ambiguity and expedite negotiations, PCS licensees urge the Commission to adopt guidelines for the elements that constitute a "comparable facility." McCaw suggests that comparable facilities should be defined as those facilities that permit continued service at interference levels no greater than users experienced on the incumbent's original facilities.[124] Southwestern Bell maintains that a comparable system should have the following components: the existing channel capacity of the relocated path, the same reliability as the relocated path, the same growth potential in terms of ability to expand the capacity of that path in the new spectrum, and the ability for backup if the existing facility already provides redundancy.[125]

72. Discussion. We continue to believe that the current negotiation process is the most appropriate means for determining comparability of the existing and replacement facilities. We believe that, in the vast majority of cases, this procedure provides parties with the necessary flexibility to negotiate terms for determining comparability that are mutually agreeable to all parties without the need for government intervention or mandate. Nonetheless, we recognize that because comparability is such a key concept of our rules, some clarification of the responsibilities and obligations of the parties with regard to comparability would be helpful. We believe that some additional clarification and specificity in this matter will facilitate negotiations and help reduce the number of disputes that could arise over reimbursement costs and the quality of new facilities. Accordingly, we propose to clarify the factors that we will use to determine when a facility is comparable, *i.e.*, equal to or superior to the fixed microwave facility it is replacing.

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[121] *Id.*

[122] Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, ET Docket No. 92-9, *Second Memorandum Opinion and Order*, 9 FCC Rcd 7797, ¶ 30 (1994) (*"ET Second Memorandum Opinion and Order"*), *appeal pending sub nom. Assoc. of Public Safety Communications Officials Int'l, Inc. v. FCC*, No 95-1104 (D.C. Cir. filed Feb. 10, 1995).

[123] *Id.*

[124] McCaw Reply at 4.

[125] Southwestern Bell Reply at 3-7.

73. As indicated above, we previously stated that to determine comparability we will consider, *inter alia*, system reliability, capability, speed, bandwidth, throughput, overall efficiency, bands authorized for such services, and interference protection. We note, however, that many of these factors are inter-related and that equivalency in each and every one of these factors is not necessary for comparability. We therefore now propose to clarify that the three main factors we will use to determine when a facility is comparable are: *communications throughput, system reliability,* and *operating cost.* A replacement facility will be presumed comparable if the new system's communications throughput and reliability are equal to or greater than that of the system to be replaced, and the operating costs of the replacement system are equal to or less than those of the existing system. This will ensure that incumbent users will perceive no qualitative difference between the original and replacement facilities.

74. For the purpose of determining comparability, we propose to define communications throughput as the amount of information transferred within the system for a given amount of time. For digital systems this is measured in bits per second ("bps"), and for analog systems the throughput is measured by the number of voice and or data channels. We propose to define system reliability as the amount of time information is accurately transferred within the system. The reliability of a system is a function of equipment failures (*e.g.*, transmitters, feed lines, antennas, receivers, battery back-up power, etc.), the availability of the frequency channel due to propagation characteristic (*e.g.*, frequency, terrain, atmospheric conditions, radio-frequency noise, etc.), and equipment sensitivity.[126] For digital systems this would be measured by the percent of time the bit error rate ("ber") exceeds a desired value, and for analog transmissions this would be measured by the percent of time that the received carrier-to-noise ratio exceeds the receiver threshold.[127] We propose

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[126] We propose to define comparable reliability as that equal to the overall reliability of the incumbent system, and we will not require the system designer to build the radio link portion of the system to a higher reliability than that of the other components of the system. For example, if an incumbent system had a radio link reliability of 99.9999, percent but an overall reliability of only 99.999 percent because of limited battery back-up power, we would only require that the new system have a radio link reliability of 99.999 percent to be considered comparable.

[127] Under this approach, for a replacement digital systems to be comparable, the data rate throughput must be equal to or greater than that of the incumbent system with an equal or greater reliability. For example, an incumbent system with a data rate of 10 Mbps with a bit error rate of .0001 would have to be replaced with a system of at least these rates to be comparable. For analog systems, an equivalent or greater number of voice or data channels with an equivalent or greater reliability would have to be provided to have a comparable facility. For example, an incumbent system that provided 24 voice channels with a reliability of 99.9999 percent would have to be replaced with a system of at least an equivalent number of channels and reliability.

to define operating cost as the cost to operate and maintain the microwave system. For the purpose of defining comparable systems, we propose to assume that the operating cost of all microwave systems are the same provided that they contain the same number of links. We also propose to consider facilities comparable in cases where the specific increased costs associated with the replacement facilities (*e.g.*, additional tower and associated radio equipment requirements, additional rents, or land acquisition costs) are paid by the party relocating the facility, or the existing microwave operator is fully compensated for those increased costs. We propose that any recurring costs be limited to a single ten-year license term. We seek comment on these definitions.

75. We recognize that comparable replacement facilities can be provided by "trading-off" system parameters. For example, communications throughput may be increased by using equipment with a more efficient modulation technique, and system reliability may be improved by using better equipment, by adding redundancy in system design (*e.g.*, multiple receive antennas) or by providing additional coding, such as forward error correction. Therefore, a system designer may take advantage of these system "trade-offs" to provide comparable facilities. We believe this flexibility in designing replacement facilities is necessary due to the many variables involved with the system design of each individual system. For example, in congested areas where there is a limited number of available channels, it may be necessary for the new system to use a smaller bandwidth than the incumbent system. In this example, it may be possible to obtain the same throughput with the same reliability even though a smaller bandwidth is used by using a more efficient modulation technique.

76. We also seek to clarify certain items that do not fall within the comparable facility requirement. For example, we propose to clarify that the obligation to provide comparable facilities under involuntary relocation requires a PCS licensee to pay the cost of relocating only the specific microwave links in the incumbent's system that must be moved to prevent harmful interference by the PCS licensee's system. While we expect that PCS licensees may voluntarily undertake to relocate entire microwave systems that include non-interfering links outside the PCS licensee's particular service area, we do not regard this as a requirement under involuntary relocation. With respect to those links that do cause interference, however, PCS licensees must provide incumbents with a seamless transition from the old facilities to the replacement facilities.[128] Thus, it may be both more efficient and more cost-effective in many instances for the parties to move all of the links in a system at once rather than to relocate them piecemeal. We seek comment on this analysis. We also tentatively conclude that comparable facilities would be limited to the actual costs associated with providing a replacement system (*e.g.*, equipment, engineering expenses). We propose to exclude extraneous expenses, such as fees for attorneys and consultants that are hired by the

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[128] *See* 47 C.F.R. § 94.59; *see also ET First Report and Order*, 7 FCC Rcd 6886 at ¶ 24.

incumbent without the advance approval of the PCS relocator. We consider such extraneous expenses to be "premium payments" that are not reimbursable after the voluntary negotiation period has concluded. We seek comment on our proposal and any alternatives.

77. In assessing comparability, we also seek comment on how to account for technological disparities between old and new microwave equipment. In many cases, microwave incumbents may seek to replace old 2 GHz analog technology with new digital technology on the relocated channel. We encourage such agreements, but we do not regard PCS licensees as being required to replace existing analog with digital equipment when an acceptable analog solution exists. An acceptable analog replacement system would provide equivalent technical capability to the incumbent without sacrificing any of the parameters we adopt as guidelines for comparable facilities (*i.e.*, speed, capacity, etc.). If incumbents desire to obtain digital equipment that exceeds these parameters, they must bear the additional cost. Similarly, in situations where equivalent analog equipment is not available, we propose to define comparable facilities as the lowest-cost digital system that satisfies the technical requirements of our proposed guidelines and is readily available. Thus, the cost obligation of the PCS licensee would be the minimum cost the incumbent would incur if it sought to replace but not upgrade its system. We seek comment on these proposals and on any alternatives. We also seek comment on whether and how depreciation of equipment and facilities should be taken into account. For example, if analog equipment is unavailable to replace an existing analog system, should the PCS licensee be permitted to compensate the microwave incumbent only for the depreciated value of the old equipment? If the incumbent chooses to bear the additional cost of upgrading its system, how should comparability be assessed? Should the PCS licensee be required to remedy problems if the upgraded system does not function properly?

78. As stated above, we believe that a more concrete definition of comparability will facilitate negotiations between microwave incumbents and PCS licensees during the voluntary period, because both sides will be better informed about PCS licensees' minimum obligation under our rules. We seek comment on whether additional information about the value of an incumbent's current system and the anticipated cost of relocation would also help to facilitate negotiations. For example, we could require that two independent cost estimates -- prepared by third parties not associated or otherwise affiliated with either the incumbent licensee or the PCS provider -- be filed with the Commission by parties that have not reached an agreement within one year after the commencement of the voluntary negotiation period (April 4, 1996 for A and B block licensees). In the *ET Second Memorandum Opinion and Order,* we strongly urged microwave incumbents to obtain such estimates early in the negotiation process (1) to provide a benchmark for negotiations, and (2) to help reduce the number of disputes over comparability brought to the Commission to resolve.[129] We further stated that, if a dispute does arise, we expect the incumbent licensee to have obtained *bona fide* independent

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[129] *ET Second Memorandum Opinion and Order*, 9 FCC Rcd 7797 at ¶ 29-31.

estimates of its relocation costs to present to the Commission for consideration.[130] We placed the responsibility for obtaining independent cost estimates on the microwave incumbent, because the incumbent is in the best position to describe the operating requirements for the new facility. We also stated, however, that the cost of obtaining the estimates would be considered part of the cost of relocation, and therefore would be recoverable from the new service provider.[131] In order for the costs to be reimbursable, however, we tentatively conclude that the third party that prepares the independent cost estimate must be mutually acceptable to both the microwave incumbent and the PCS licensee. We seek comment on whether we should require the parties to submit such cost estimates during the voluntary negotiation period. We also seek comment on what procedures should be used if the microwave incumbent and the PCS licensee cannot agree on a third party to prepare the independent cost estimate. Would such a requirement facilitate negotiations?

3. Public Safety Certification

79. Background. As we have stated in the past, we are convinced that PCS service may be precluded or severely limited in some areas unless public safety licensees relocate.[132] At the same time, we have remained cognizant that some public safety and emergency services warrant special protection.[133] Thus, we have provided this select group of licensees with a longer period during which to negotiate and arrange for relocation.[134] In the *ET Third Report and Order*, we clearly identified the select group of licensees that warrant special treatment for relocation purposes.[135] Our rules limit such special treatment to Part 94 facilities currently licensed on a primary basis under the eligibility requirements of Section 90.19, Police Radio Service; Section 90.21, Fire Radio Service; Section 90.27, Emergency Medical Radio Services; and Subpart C of Part 90, Special Emergency Radio Services, provided that the majority of communications carried on those facilities are used for police, fire, or emergency medical services operations involving safety of life and property.[136] PCIA has requested that we define a process to allow PCS licensees access to information essential to confirm that a microwave licensee's link (or links) qualifies for the extended transition period

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[130] *Id.* at ¶ 29.

[131] *Id.* at ¶ 30 and n. 44.

[132] *ET Second Memorandum Opinion and Order*, 9 FCC Rcd 7797 at ¶ 20.

[133] *ET Third Report and Order*, 8 FCC Rcd 6589 at ¶ 50.

[134] *ET Memorandum Opinion and Order*, 9 FCC Rcd 1943 at ¶¶ 36-41.

[135] *ET Third Report and Order*, 8 FCC Rcd 6589 at ¶ 52.

[136] *Id.* at ¶ 52, as modified on reconsideration by *ET Memorandum Opinion and Order*, 9 FCC Rcd 1943.

reserved for emergency public safety uses.[137]

80. Discussion. We agree with PCIA that PCS licensees should have a readily available means of confirming a microwave licensee's public safety status for purposes of our relocation rules. We therefore tentatively conclude that the public safety licensee must establish: (1) that it is eligible in the Police Radio, Fire Radio, or Emergency Medical, or Special Emergency Radio Services, (2) that it is a licensee in one or more of these services, and (3) demonstrate that the majority of communications carried on the facilities involve safety of life and property, before it may receive special treatment (*e.g.*, an extended voluntary negotiation period) under the Commission's rules. The public safety licensee must provide such documentation to the PCS licensee promptly upon request. If the incumbent fails to provide the PCS licensee with the requisite documentation, the PCS licensee may presume that special treatment is inapplicable to the incumbent. We seek comment on our proposal.

81. Although we have granted this select class of licensees special protection, we nevertheless urge public safety licensees to relocate as soon as possible. These licensees must relocate eventually and, to the extent feasible, we encourage them to relocate sooner rather than later. We do not intend for public agencies to delay deployment of PCS services if at all avoidable.

4. Disputes Between Microwave Incumbents and PCS Licensees

82. To the extent that disputes arise between microwave incumbents and PCS licensees over relocation negotiations (including disputes over the comparability of facilities and the requirement to negotiate in good faith), we stated in ET Docket No. 92-9[138] that parties are encouraged to use alternative dispute resolution techniques.[139] We emphasize again that resolution of such disputes entirely by our adjudication processes would be time consuming and costly to all parties. Therefore, we continue to encourage parties who are unable to voluntarily conclude relocation agreements to employ ADR techniques during both the voluntary and mandatory negotiation periods.

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[137] PCIA Late-Filed Comments, Oct. 4, 1995.

[138] *ET Third Report and Order*, 8 FCC Rcd 6589 at ¶¶ 38-39; *ET Second Memorandum Opinion and Order*, 9 FCC Rcd 7797 at ¶ 28.

[139] *See Use of Alternative Dispute Resolution Procedures in Commission Proceedings and Proceedings in which the Commission is a Party*, 6 FCC Rcd 5669 (1991). Information regarding the use of alternative dispute resolution is available from the Commission's Designated ADR Specialist, ADR Program, Office of the General Counsel, Federal Communications Commission, 1919 M Street, N.W., Washington D.C. 20554.

C. Twelve-Month Trial Period

83. Background. Our existing rules provide a twelve-month period for relocated microwave incumbents to test their new facilities.[140] PCIA requests that the Commission clarify these rules to state that this twelve-month trial period begins when the incumbent starts using its new system.[141] PCIA also asks the Commission to state that microwave licensees will be required to surrender their authorizations to the Commission at the end of the twelve-month trial period, and that the Commission will issue a public notice to inform all PCS licensees that the incumbent has been successfully relocated.[142]

84. Discussion. The purpose of the twelve-month trial period is to ensure that microwave incumbents have a full opportunity to test their new systems under real-world operating conditions and to obtain redress from the PCS licensee if the new system does not perform comparably to the old system or pursuant to agreed-upon terms. We agree with PCIA that this period should run from the time that the microwave licensee commences operations on its new system, and we propose to clarify our rules accordingly. We seek comment on this proposal.

85. With respect to the surrender of microwave incumbents' licenses, we are unaware of any reason why a relocated microwave licensee would require its original 2 GHz license after it has successfully tested its new system. Therefore, we tentatively agree with PCIA that microwave licensees that have retained their 2 GHz authorizations during the twelve-month trial period should surrender them at the conclusion of that period. Moreover, we do not believe that microwave licensees are required to retain their 2 GHz licenses through the trial period in order to retain their rights to relocation and comparable facilities. Our rules provide that, if the new facility is found not to be comparable during the trial period, the PCS licensee must either cure the problem, restore the incumbent to its original frequency, or relocate it to an equivalent 2 GHz frequency. In our view, all of these rights reside with the incumbent as a function of our relocation rules, regardless of whether the incumbent has previously surrendered its license. We therefore propose to clarify our rules to indicate that a microwave licensee may surrender its license as part of a relocation agreement without prejudice to its rights under our relocation rules. We request comment on this proposal.

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[140] 47 C.F.R. § 94.59(e).

[141] PCIA Late-Filed Comments, July 13, 1995 at 2.

[142] *Id.*

D. Licensing Issues

1. Interim Licensing

86. Background. PCIA urges the Commission to grant no additional microwave links primary status in the PCS band.[143] Under our existing rules, new 2 GHz fixed facilities are licensed only on a secondary basis.[144] However, licensees with existing 2 GHz fixed facilities licensed before January 2, 1992, are permitted to make modifications and minor extensions to their systems and retain their primary status.[145] Acceptable modifications include: changes in antenna azimuth, changes in antenna beamwidth, changes in channel loading, changes in emission, changes in station location, any change in ownership or control, increases in antenna height, increases in authorized power, any reduction in authorized frequencies, or addition of frequencies not in the 2 GHz band.[146] Major modifications or expansions of existing 2 GHz microwave facilities are permitted only on a secondary basis, unless a special showing of need is made that justifies primary status.[147] Primary status entitles a facility to interference protection from a PCS facility.[148]

87. PCIA argues that any new links granted primary status will only increase the number of links that PCS providers must relocate and will thus delay the delivery of PCS to the public.[149] PCIA urges the Commission to grant microwave applications only on a non-primary basis, so that the growth and operability of existing systems will not be impeded.[150] Southwestern Bell alleges that, for a number of reasons, microwave licensees find it difficult to establish the primary status of their microwave paths and therefore difficult to establish their right to relocation benefits under Commission rules. Southwestern Bell therefore requests that the Commission establish clear rules to delineate those microwave paths that will

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[143] *See* PCIA Late-Filed Comments, July 13, 1995, at 2.

[144] *See, e.g.*, 47 C.F.R. § 94.63.

[145] "2 GHz Licensing Policy Statement," *Public Notice*, Mimeo No. 23115, May 14, 1992; *see also ET Third Report and Order,* 8 FCC Rcd 6589, 6611 (1993) at ¶ 53 - 55.

[146] *Id.*

[147] *Id.*

[148] *See, e.g.*, 47 C.F.R. § 94.63.

[149] PCIA Ex Parte Comments, July 13, 1995, at 2.

[150] *Id.*

receive primary status in the future.[151]

88. Discussion. As a general matter, we agree with PCIA that allowing additional primary site grants in the 2 GHz band now that relocation negotiations are ongoing will unnecessarily impede negotiations and may add to the relocation obligations of PCS licensees.[152] Nevertheless, we recognize that some minor technical changes to existing microwave facilities may be necessary for incumbents' continued operations. We do not believe, however, that these minor technical modifications will significantly increase the cost to a PCS licensee of relocating a particular link.

89. To the extent practicable, we propose to continue applying the current rules governing primary and secondary status to modification and minor extension applications pending as of the adoption date of this *Notice*. While the rulemaking proceeding is pending, we will continue to accept applications for primary status, however we will process only minor modifications that would not add to the relocation costs of PCS licensees. Thus, we will grant primary status applications for the following limited number of technical changes: decreases in power, minor changes in antenna height, minor coordinate corrections (up to two seconds), reductions in authorized bandwidths, minor changes in structure heights, changes in ground elevation (but preserving centerline height), and changes in equipment.[153] Any other modifications will be permitted only on a secondary basis, unless a special showing of need justifies primary status *and* the incumbent is able to establish that the modification would not add to the relocation costs of PCS licensees.[154] In addition, we will carefully scrutinize any applications for transfer of control or assignment to establish that our microwave relocation procedures are not being abused, and that the public interest would be served by the grant. As of the adoption date of our new rules, we propose to grant all other modifications and extensions solely on a secondary basis (with the exception of the minor technical changes listed above). Secondary operations may not cause interference to operations authorized on a primary basis, and they are not protected from interference from primary operations.[155] We

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[151] *See* Southwestern Bell Reply, Exhibit 1 at 7-8.

[152] As we stated in the *ET Third Report and Order*, our goals in reallocating 2 GHz for emerging technologies were to provide for reaccommodation of existing 2 GHz fixed operations in a manner that would be advantageous to the incumbent licensee, not disrupt those communications services, and foster introduction of new services and devices. 8 FCC Rcd 6589 at ¶ 4.

[153] This list of minor technical modifications is more limited than the acceptable modifications listed in *Public Notice*, Mimeo No. 23115, May 14, 1992.

[154] In light of the limited circumstances under which we will grant primary status, the Commission does not believe that it will receive mutually exclusive applications.

[155] *See, e.g.*, 47 C.F.R. § 90.7.

believe that granting secondary site authorizations serves the public interest, because it balances existing licensees' need to expand their systems with the goal of minimizing the number of microwave links that PCS licensees must relocate. We seek comment on this proposal.

2. Secondary Status After Ten Years

90. The Commission's rules state that the Commission will amend the operation license of the fixed microwave operator to secondary status only if the emerging technology service entity provides the 2 GHz incumbent with comparable facilities.[156] We seek comment on whether there should be some time limit placed on the emerging technology provider's obligation to provide comparable facilities. For example, we gave private operational fixed microwave stations in the 12 GHz band five years to relocate their facilities, after which time they became secondary to the Direct Broadcast Satellite ("DBS") Service.[157] We tentatively conclude that microwave incumbents should not retain primary status indefinitely on spectrum licensed for emerging technology services. Thus, we propose that microwave incumbents that are still operating in the 1850 - 1990 MHz band on April 4, 2005, should be made secondary on that date. This date coincides with the date that the clearinghouse would be dissolved and provides adequate time for completion of microwave relocation. We seek comment on our proposal.

IV. CONCLUSION

91. We adopt this *Notice* to solicit public comment regarding the general desirability of establishing a cost-sharing mechanism for microwave relocation. We also solicit comment on whether to clarify or modify certain other aspects of the microwave relocation rules adopted in our *Emerging Technologies* docket, ET Docket No. 92-9.

V. PROCEDURAL MATTERS

A. Regulatory Flexibility Act

92. As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small entities of the proposals suggested in this document. The IRFA is set forth in Appendix A. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines as comments on the rest of the *Notice*, but they

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[156] 47 C.F.R. § 94.59(c).

[157] Establishment of a Spectrum Utilization Policy for the Fixed and Mobile Service' Use of Certain Bands Between 947 MHz and 40 GHz, *First Report and Order*, GEN Docket No. 82-334, 54 RR 2d 1001.

must have a separate and distinct heading designating them as responses to the Initial Regulatory Flexibility Analysis. The Secretary shall send a copy of this *Notice*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration in accordance with paragraph 603(a) of the Regulatory Flexibility Act.[158]

B. Ex Parte Rules - Non-Restricted Proceeding

93. This is a non-restricted notice and comment rulemaking proceeding. *Ex parte* presentations are permitted except during the Sunshine Agenda period, provided they are disclosed as provided in Commission rules.[159]

C. Comment Period

94. Pursuant to applicable procedures set forth in Sections 1.415 and 1.419 of the Commission's rules, interested parties may file comments on or before **November 30, 1995**, and reply comments on or before **December 21, 1995**.[160] To file formally in this proceeding, you must file an original and four copies of all comments, reply comments, and supporting comments. If you want each Commissioner to receive a personal copy of your comments, you must file an original plus nine copies. You should send comments and reply comments to Office of the Secretary, Federal Communications Commission, Washington, D.C. 20554. Comments and reply comments will be available for public inspection during regular business hours in the Reference Center of the Federal Communications Commission, Room 239, 1919 M Street, N.W., Washington, D.C. 20554. A copy of all comments should also be filed with the Commission's copy contractor, ITS, Inc., 2100 M Street, N.W., Suite 140, (202) 857-3800.

D. Authority

95. The proposed action is authorized under the Communications Act, Sections 4(i), 7, 303(c), 303(f), 303(g), 303(r), and 332, 47 U.S.C. §§ 154(i), 303(c), 303(f), 303(g), 303(r), 332, as amended.

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[158] Pub. L. No. 96-354, 94 Stat. 1164, 5 U.S.C. § 601 *et seq.* (1981).

[159] *See generally* 47 C.F.R. §§ 1.1202, 1.1203, and 1.1206(a).

[160] *See* 47 C.F.R. §§ 1.415 and 1.419.

E. Ordering Clause

96. IT IS ORDERED THAT, as of the adoption date of this *Notice*, the Commission will continue to accept microwave applications for primary status in the 2 GHz band, however we will process only minor modifications that would not add to the relocation costs of PCS licensees, as described in Section III(D)(1), *supra*.[161]

F. Further Information

97. For further information concerning this proceeding, contact Linda Kinney, Legal Branch, Commercial Wireless Division, Wireless Telecommunications Bureau at (202) 418-0620.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

[161] This constitutes a procedural change which is not subject to the notice and comment and 30-day effective date requirements of the Administrative Procedure Act (APA). *See Neighborhood TV Co., Inc. v. FCC*, 742 F.2d 629 (D.C. Cir. 1984); *Buckeye Cablevision, Inc. v. United States*, 438 F.2d 948 (6th Cir. 1971). In any event, good cause exists under 5 U.S.C. Section 553(b)(3)(B) and (d)(3), because additional primary site grants in the 2 GHz band will unnecessarily impede the purpose of the current relocation rules and any new relocation rules adopted in this proceeding.

APPENDIX A

INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small entities of the policies and rules proposed in this *Notice of Proposed Rule Making* (*Notice*). Written public comments are requested on the IRFA.

Reason for Action: This rulemaking proceeding was initiated to secure comment on a proposal for sharing costs among broadband PCS licensees that will relocate 2 GHz point-to-point microwave licensees currently operating on the spectrum blocks allocated for PCS. This proposal would promote the efficient relocation of microwave licensees by encouraging PCS licensees to relocate entire microwave systems, rather than individual microwave links, thus bringing PCS services to the public in an efficient manner. We have also posed questions about the process of voluntary negotiations to date, proposed guidelines for the definition of comparable facilities, clarified some aspects of the twelve-month trial period after relocation, and have proposed licensing microwave facility modifications and additions on a secondary basis only after any cost-sharing proposal is adopted.

Objectives: Our objective is to require PCS licensees that benefit from the relocation of a microwave link to contribute to the costs of that relocation. A cost-sharing plan is necessary to enhance the speed of relocation and provide an incentive to PCS licensees to negotiate system-wide relocation agreements with microwave incumbents. This action would result in faster deployment of PCS and delivery of service to the public.

Legal Basis: The proposed action is authorized under the Communications Act, Sections 4(i), 7, 303(c), 303(f), 303(g), 303(r), and 332, 47 U.S.C. §§ 154(i), 303(c), 303(f), 303(g), 303(r), 332, as amended.

Reporting, Recordkeeping, and Other Compliance Requirements: Under the proposal contained in the *Notice*, PCS licensees that relocate microwave systems would be required to document the relocation costs paid and report them to a central clearinghouse. Later PCS market entrants would then be required to file Prior Coordination Notices with the clearinghouse and, if necessary, reimburse the initial relocating PCS licensee on a *pro rata* basis.

Federal Rules Which Overlap, Duplicate or Conflict With These Rules: None.

Description, Potential Impact, and Number of Small Entities Involved: This proposal would benefit small microwave incumbents by encouraging PCS licensees to relocate entire microwave systems, rather than individual links that interfere with the PCS licensee's operations. Microwave licensees would therefore begin operations on their new channels in

an expedited fashion. The 2 GHz fixed microwave bands support a number of industries that provide vital services to the public. We are committed to ensuring that the incumbents' services are not disrupted and that the economic impact of this proceeding on the incumbents is minimal. We must further take into consideration that not all of the incumbent licensees are large businesses, particularly in the bands above 2 GHz, and that many of the licensees are local government entities that are not funded through rate regulation. We believe that this proceeding would further our policy of encouraging voluntary agreements to relocate fixed microwave facilities to other bands during the two-year period. After evaluating comments filed in response to the *Notice*, the Commission will examine further the impact of all rule changes on small entities and set forth its findings in the Final Regulatory Flexibility Analysis.

Significant Alternatives Minimizing the Impact on Small Entities Consistent with the Stated Objectives: We have reduced burdens wherever possible. The regulatory burdens we have retained are necessary in order to ensure that the public receives the benefits of innovative new services in a prompt and efficient manner. We will continue to examine alternatives in the future with the objectives of eliminating unnecessary regulations and minimizing any significant economic impact on small entities.

IRFA Comments: We request written public comment on the foregoing Initial Regulatory Flexibility Analysis. Comments must have a separate and distinct heading designating them as responses to the IRFA and must be filed by the comment deadlines set forth in this *Notice*.

APPENDIX B

LIST OF PARTIES SUBMITTING COMMENTS

American Petroleum Institute (API Comments), June 15, 1995.
Association of American Railroads (AAR Comments), June 15, 1995.
BellSouth Corporation, BellSouth Telecommunications, BellSouth Enterprises, BellSouth Wireless, and BellSouth Personal Communications (BellSouth Comments), June 15, 1995.
City of San Diego (City of San Diego Comments), June 15, 1995.
Cox Enterprises (Cox Comments), June 15, 1995.
Cellular Telecommunications Industry Association (CTIA Comments), June 15, 1995.
Duncan, Weinberg, Miller and Pembroke (Duncan, Weinberg Comments), June 15, 1995.
Metropolitan Water District of Southern California (Metropolitan Comments), June 15, 1995.
Personal Communications Industry Association (PCIA Comments), June 15, 1995.
Southwestern Bell Mobile Systems (Southwestern Bell Comments), June 15, 1995.
Sprint Telecommunications Venture (Sprint Comments), June 15, 1995.
Utilities Telecommunications Council (UTC Comments), June 15, 1995.

LIST OF PARTIES SUBMITTING REPLY COMMENTS

Association of American Railroads (AAR Reply), June 30, 1995.
Association of Public Safety Communications Officials-International, Inc. (APCO Reply), June 30, 1995.
BellSouth Corporation, BellSouth Telecommunications, BellSouth Enterprises, BellSouth Wireless, and BellSouth Personal Communications (BellSouth Reply), June 30, 1995.
Cox Enterprises (Cox Reply), June 30, 1995.
Keller and Heckman (Keller and Heckman Reply), June 30, 1995.
McCaw Cellular Communications, Inc. (McCaw Reply), June 30, 1995.
Pacific Bell Mobile Services (PacBell Reply), June 30, 1995.
Personal Communications Industry Association (PCIA Reply), June 30, 1995.
Southwestern Bell Mobile Systems (Southwestern Bell Reply), June 30, 1995.
UTAM (UTAM Reply), June 30, 1995.
Utilities Telecommunications Council (UTC Reply), June 30, 1995.

LIST OF LATE-FILED COMMENTS

BellSouth Corporation, BellSouth Telecommunications, BellSouth Enterprises, BellSouth Wireless, and BellSouth Personal Communications (BellSouth Late-Filed Comments), August 3, 1995.
Cellular Telecommunications Industry Association (CTIA Late-Filed Comments), July 11, 1995, September 22, 1995, and September 27, 1995.
Keller and Heckman (Keller and Heckman Late-Filed Comments), August 16, 1995 and September 1, 1995.

Pacific Bell Mobile Services (PacBell Late-Filed Comments), August 8, 1995, and September 6, 1995.
Pacific Telesis Group (Pac-Tel Group Late-Filed Comments), September 11, 1995.
Personal Communications Industry Association (PCIA Late-Filed Comments), July 10, 1995, July 13, 1995, July 25, 1995, August 8, 1995, September 6, 1995, September 22, 1995, and October 4, 1995.
Telecommunications Industry Association (TIA Late-Filed Comments), July 21, 1995.
UTC, The Telecommunications Association (UTC Late-Filed Comments), July 19, 1995.

Letter from Jay Kitchen, President, PCIA, to Chairman Reed Hundt, April 29, 1995.
Letter from Jay Kitchen, President, PCIA, to Regina Keeney, Chief, Wireless Telecommunications Bureau, May 24, 1995.
Letter from Jay Kitchen, President, PCIA, to Mr. Caton, July 10, 1995.
Letter from William J. Post, Arizona Public Service Company, to Glen Groenhold, Manager, Wireless Co. LP, August 25, 1995.